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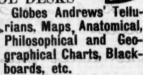
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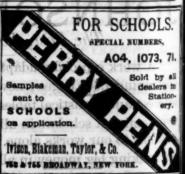


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GENERAL EASTERN AGENTS: HENRY A. YOUNG & CO., 55 Franklin Street, Boston, Mass.

New York, Aug 22, 1885.

CONTENTS OF THIS NUMBER. EDITORIAL: General Grant—His Personal Power—Keeping His Own Counsels—Pointed Hemarks—Dislike of Self-Display— Not a Great Financier. Publication of Deeds of Shame. EDITORIAL NOTES.
EDUCATIONAL ARTICLES: Training and Preparation of Teachers.
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BOOK DEPARTMENT:

New Books.

DURING the past few weeks the air has been full of General Grant, and it is well, So great a man should be studied; it becomes a duty to do so. When the third great man our country has produced passes away, it is right for thoughtful men to stop and think how his character may help them. Especially is this a duty for teachers. Standing as guides of youth, nothing can so influence the character of the guidance they should receive, as the recital of the lives of those who have influenced the thoughts and actions of men. Teachers, more than any other class, should understand the secret of the wonderful influences coming from such leadand Grant. As teachers it is their duty to study the character of our dead General.

Dr. Vincent, who was his pastor at one never wasted time in trying to fit a Europetime before the war, says that he was a men an square peg into an American round hole. of marvellous personal power. He had great magnetic force, and there was in him a mystic psychological energy that gave him a anything. As soon as he tries to be some-peculiar hold on all who truly knew him. He body else he fails. This is an excellent point was a man of clear insight into the quality of men, and of unrelenting purpose; while his amiability and gentleness made one's love for him fervent, tender, and unchang-ing, much like one's love for a noble and gentle woman. What a lesson here for teachers! What more influences the young than that peculiar something called "personal influence"? The pupils of a teacher of personal power never tire of talking about him; and they are moved through all their after lives by the subtle influences silently going out from his presence. It is hard to tell why, but it is a fact that the more some teachers are known the more their pupils are drawn to them. It is this secret something that makes them what they are. Grant had this power more than almost any other American.

Grant knew how to keep his own counsels. An amusing incident is mentioned concerning him in September Harper. He was on his first trip through New England the summer after the close of the war. It was the first of those grand ovations with which he was always greeted by the people through whose communities he traveled. The train stopped for a few minutes at a small town in Maine, and the people, as usual, took the opportunity of extending their greeting and delivering their words of welcome. As the General stood in the doorway of the rear car, a tall, gaunt-looking woman elbowed her way through the crowd till she got near the platform. Here she stopped and put on a pair of spectacles with glasses in them that looked about as big as the lenses in large telescopes, and taking a good look at the General, said, gasping for breath as she spoke, "Well, I've come down hyere a-runnin' right on the clean jump, nigh on to tew mile, just to get a look at the man that lets the women do all the

General Grant was given to making pointed and brief remarks that carried with them wonderful force. He spoke of the commander at Bermuda Hundred being "in a bottle strongly corked." His expressions, "I propose to move immediately on your works," "I shall take no backward steps," "I propose to fight it out on this line if it takes all summer," and "Let us have Peace," have become historic words, but they reveal one secret of wonderful power he had over men. No trait of character in teachers is more admired by pupils than this one of stating a great truth in a few words. All of the greatest teachers have had it, and their savings constitute the most impressive portions of their lives.

General Porter says that his success de ers of men as Napoleon, Washington, Lincoln pended upon his powers of invention rather to the conditions surrounding him. He details now altogether too common.

What could be a better description of a successful teacher? He is himself if he is for teachers to consider.

No man disliked self-display more than he. When he died he did not possess a single uniform that he could be buried in. It has been well said that he was willing and glad to do work, but unwilling to make a show of it. He hated to be put on exhibition and parade himself before a crowd. No officer in the army disregarded the pomp and trappings of war more than he. This trait also made him accessible to all who needed to see him. No one found any difficulty in coming in close understanding with him, and getting a respectful hearing. What admirable traits are these for teachers!

Grant's life has taught the world that a man can be great and yet not a great financier. It has been truthfully said that when he hauled wood and sold it he did not drive as advantageous bargains, or make as good a living, as most of the farmers about him. When conducting his store in Galena his financiering was hardly equal to that of a couptry merchant; but he could force a satisfactory settlement of the Alabama Claims, he could throttle the attempts of evil men to cripple the finances of a nation, he could collect fifteen millions from Great Britain, but he could not protect his own savings from the miscreants in Wall Street. Teachers are often blamed because they do not manage to save more money, but in the lives of such men as Grant and Lincoln they can find comfort, for they prove that the highest qualities of mind and heart can be found in men unable to amass wealth.

It is a question of great importance how much the publication of deeds of sin should be permitted. The revelations of the Pall Mail Gazette have produced a profound sensation throughout the world, but its recitals of acts of shame are revolting to the purity and delicacy of the better part of the reading public. Sin exists, and its minute workings and ways must be known to those whose duty it is to suppress it, but our papers are not called upon to fill their columns with its unutterable filth. The telling of sin is a temptation to sin. The minute description of hellish deeds of shame and crime should be published and circulated only among the abodes of the lost. Under the guise of telling the news, our daily papers are printing what no decent man or woman ought to read. When a taste is formed for what is low and vile it is never fully overcome. The imagination becomes filled with images of sin, taking the place of what might be impressions of purity and virtue. If there is any regard left for the young in the hearts pended upon his powers of invention rather of the publishers of our daily papers, they than adaptation. His system was applicable should hesitate before printing the horrible

WE are pleased to learn that Prof. Thos. M. Balliet has accepted the superintendency of the schools of the City of Reading, Pa. No better choice could have been made. We are glad to learn that by an agreement with the Board of Reading he will continue to give a portion of his time to teachers' institutes, where he has already done such acceptable work.

The cause of education in Minnesota has lost an able and successful advocate in the death of Supt. C. E. Smith of Minneapolis. He was the first county superintendent successfully to carry into practice a system of grading of country schools. His heart was thoroughly in his work, and death found him in the harness. The State of Minnesota mourns the loss of one of its ablest educational

MEMBERS of the New York Reading Circle will notice that the two books to be read during the six months ending Jan. 1, 1886, are Page's Theory and Practice of Teaching, and Johonnot's Principles and Practice of Teaching. It was found that the abridgment of Sully's Psychology could not be made ready before the first half of the next year. The price of Johonnot's book will be published in our next issue.

ONE of the most useful arithmetics published during the past few years is issued by W. H. Sadler, Baltimore, Md. It is especially serviceable to teachers who wish to find good examples to dictate to their classes. It is frequently difficult to find such material, but in Sadler's Hand Book a large number can be found. It is in reality what it claims to be, a Hand Book of Practical and Business Arithmetic.

The many friends of Professor E. V. De Graff, the well known author and institute conductor, will be pained to hear of his death. At the recent meeting of the National Association he was confined to his room at his hotel in Saratoga, hoping to gather strength for labor in the School of Methods, but Providence ordained otherwise, and his work on earth is ended. He was an earnest, active man, thorough in methods and faithful in the performance of his duties. We hope in the future to be able to present a full outline of his life and writings.

Dr. EUGENE BOUTON and Professor Barnes recently conducted a most successful institute at Oneonta in this state. There were present on the first day 341 teachers. Has any other institute in the State of New York numbered so many? We doubt it. Some of the old "stagers" in the institute work can enlighten us on the subject. At all events this attendance speaks volumes for the enterprise and energy of the commissioners and teachers of Otsego county.

PROF. H. R. SANFORD has found time to give a little educational help to North Carolina. In reference to his work, the North Carolinian says concerning his lecture on "The Price Paid, and Value Received" that it was "an excellent one. It was thoughtful, suggestive and practicable as all his lectures and educational works appear to be. It was the closing exercise of the Normal School. The teachers were deeply interested. They not only felt that they had been very much benefited, but they formed a resolution to do more and better work in the school room than they had been doing. They became attached to the Professor and appeared loth to part with him. He is certainly specially fitted for his work."

It is the design of the editors to make the JOURNAL more than ever helpful to the teachers. We shall spare no efforts to make it brim full of good things. The world is moving on and we expect to move on with it. Standing still is not our motto. Our aim is to make a paper that will be helpful to the working teacher who wants help, and to the live superentendent who wishes his teachers to grow better. Our object is reached when teachers write to us, "You help me more than I can express"; "I could not do without the JOURNAL"; "Go on in the good work, you are on the right track." After much thought we have con-

cluded that no department of the JOURNAL can be omitted, nor does it seem that we can materially change our "make-up" for the better. We shall give all the space possible to such practical, helpful articles as will aid the inquiring teacher. Our readers will notice several valuable ones in this number. More like them are to follow.

Speak a good word for us when you are able. The larger our subscription list, the more we shall be able to do for you. In this, as in all other kinds of business, co-operation is the basis of success. We thank you for your help in the past and hope we shall deserve it more and more in the future.

Some time ago a subscriber suggested the formation of Correspondence Classes, and the more we think about the subject the more the idea seems to us to be a good one. A question often comes to a teacher that he cannot answer. If, under these circumstances, he had a dozen persons to whom he could send it, some one, doubtless, would be able to help him out. In a multitude of councillors there is safety. The plan of working, in practically carrying out this idea, seems to us ought to be as follows:

Classes should be divided into Primary, Academic, and Advanced grades. Individuals desiring to join should specify to which division they wish to be assigned.

Circles in each of these grades should be organized, consisting of not more than ten members each. Each member of a circle would be notified of the names and addresses of all the other members. To each of these he would send his question. Each member of a circle, on receiving such a question, would attempt an answer, and send to all the other members his reply.

Each circle would have a secretary, who would send the question, when answered, to us for publication.

Any question sent by us for solution would be forwarded to the secretary of some circle, who would at once send it to each member of his circle for answer.

In this way a methodical and thorough system of receiving and answering questions could be arranged, productive of great good to the members of the class, and wider benefit to the many readers of the JOURNAL and INSTITUTE. Send us your names, if you wish to join such a class, being sure to specify to which division of work you desire to be assigned.

The Department of Geography in the Saratoga Summer School of Methods made a very interesting educational exhibit at the Methodist Church during the session of the National meeting. The exhibit consisted of solar camera, charts, globes, books, maps of all kinds, pictures, portraits, views, putty maps, specimens of wood, ferns, etc., etc., which attracted vast numbers and made members for the school.

The faculty of the School of Methods at Saratoga consists of some of the leading educators of the country, from whom teachers are now improving the opportunity of gaining choice information. Besides these men are a number of prominent practical teachers who explain their successful methods and discuss them with their classes, bringing into this discussion actual every-day experience in the class-room with improved methods applied.

In these late days there is no room for theories

beautifully wrought out from library shelves.

Every one in attendance expresses himself more than pleased with the opening lectures of the School of Methods. The greatest enthusiasm prevails.

The management have endeavored to be courteous and accommodating to the last degree.

One hundred and ten have actually registered and new members are joining each day.

This success makes the School of Methods an established fact, and the prospects for a very large increase next year are highly flattering. Renewed efforts will be made to keep the school at the head of the list of summer schools.

There are many beautiful as well as historical all who wish to enter.

places near Saratoga which all should visit. A most interesting and enjoyable excursion is a trip up Lake George, visiting Ticonderoga on the way.

The most popular ticket sold at the School of Methods is that granting the privilege of receiving instruction in any or all departments, consequently nearly every class is full, and in some cases crowded.

This indicates what live teachers have all along felt the need of—instruction from practical teachers in improved methods.

BROTHER RAUB, of the Educational News, takes us to task for making mistakes in the names of prominent teachers in our report of the Pennsylvania State Association. The only answer we can give is that we followed the report printed in the Harrisburg papers. We think Pennsylvania men ought to be able to spell their own names. The News accuses us of circulating a "padded edition" of our papers for the purpose of practicing decep-There is absolutely no truth in this charge, tion. The July numbers of the JOURNAL and INSTITUTE are filled with an unusual number of advertise ments, but this takes nothing from the number of pages devoted to reading matter, but adds to them, while it enables us to give away a larger number of copies than otherwise we could be able. The number of pages in our usual issues is distinctly stated. Nowhere are the summer numbers made to appear as though they were in their usual dress. Advertisers never throw away money if they know it, and it is their as preciation of the benefit they receive from appearing in our columns that leads us to enlarge the number of pages in our special editions. Advertising pays in some papers; in some it does not.

Does the News wish to compare our number of pages from week to week and month to month with itself? Leaving out the question of quality, how does the quantity question stand? Here is where the shoe pinches.

THE doctrine of the Perseverance of the Saints has been a favorite one with the old Calvinists, but the doctrine of the Perseverance of Teachers should be equally popular with all pedagogues. No man or woman putting his hand to the plow and looking back, is fit for a school teacher. Stick to what you begin to do! It was unyielding persistency that enabled Grant to succeed, and it will help any teacher out of much trouble.

This is our text. Our address is to members of Reading Circles who have commenced and think of backing out. Some little work is to be done; an examination is to be passed; a book is to be bought; daily application for a few minutes is required, and, poor souls! they sit down and cry, "I'll give it up." Give it up? Are you children? No. Rather in the spirit of men and women worthy of the magnificent profession you have entered, and the stirring age into which you have been born, say with a spirit of determination, "Pll never give it up!" There is no mountain to be crossed, or lion in the way. Suppose your commissioner, or city superintendent, is lukewarm. Is that any reason why you should be? Is he your educational thermometer?

Some members of the New York Reading Circle commenced late. To such we would say that you can take your first examination next January. If you do not understand exactly what to do, it needs only a postal card, addressed to the secretary, Jerome Allen, 25 Clinton Place, New York, to find out all you want.

The JOURNAL will devote, each week, a column to Reading Circles in this and other states. Just now the New York Circle is Reading Page's "Theory and Practice of Teaching." We shall give from week to week until the middle of October, some hints helpful to those who are studying this most valuable educational classic. Our aim will be to do all in our power to give life and success to this most admirable educational movement. There is much to hope from this new enterprise. We take this occasion to say once more that the doors of the New York Reading Circle are open to all who wish to enter.

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THE TRAINING AND PREPARATION OF into an Institute. They will represent all grades of teachers. Talk on general principles, and many

BY SUPT. GEORGE GRIFFITH, LOCKPORT, N. Y.

Looking back over my own course of study as a student, my efforts and growth as a teacher, my experience and observation as a commissioner and superintendent, and my study of, and thought upon, the great work of teaching, I draw a few conclusions that have relation to the training and preparation of teachers. These are presented not as indisputable dogmas, but as my present belief—the result of my honest study.

AFTER MORAL QUALIFICATIONS, THE FIRST ESSEN-TIAL IN A TEACHER IS SUFFICIENT EDUCATION.

The more education a young person has the better will he be fitted for a teacher, even of the youngest child. Still, if a young person, ready for the high or normal school, has four years in which he must prepare himself for a teacher, I believe he will have a better preparation for that work, if but three years of this time is given to the ordinary academic studies, and the remaining one year to the specific study of methods of teaching, and to observation and practice actual teaching.

THERE IS GENERALLY IMMENSE LOSS IN PLACING YOUNG PERSONS, HOWEVER BROAD THEIR EDUCATION, YET UNTRAINED IN THE SCIENCE AND ART OF TEACHING, IN CHARGE OF OUR SCHOOLS.

By all means then give our teachers the broadest education and the highest culture possible; but if a part of this must be foregone or all special training neglected, it seems to me far the better that the special training be secured.

Of late one thought upon this subject has seemed to force itself more and more to the front in my mind. It is that, in our training of teachers, we should follow the analogy of what we consider good teaching of children. Allow me to specify.

I think most teachers hold as a part of their educational doctrine, even if they do not always practice it, that truth which in its various phases is expressed by such statements as: "Self-activity is the law of mental growth," or, "Never tell a child what you can lead him to discover for himself."

PSYCHOLOGY IS THE BASIS OF METHODS OF TEACH-ING, AND THERE ARE EDUCATIONAL PRINCIPLES FULLY ESTABLISHED THAT SHOULD BE FOLLOWED IN ALL TRACHING.

But with our young would-be teachers we attempt too much-we cram, where we should attempt but little and do that little well. In my experience I have yet to find the treatise on mental philosophy that I can follow with an ordinary class in methods of teaching. All are too complicated and minute. My plan has been to stand before the class and lead them to gain knowledge through each of their five senses. When they see that they have gained knowledge, and that their minds have acted. I then tell them that to that action of the mind by which it gains knowledge we give the name perception. Then follows an investigation to discover what properties of objects are best found out through each sense, which senses most need cultivation, why the perceptive powers should be trained, how they can best be trained, and how all this can be given a concrete application in to-morrow's school. Another respect in which we would do well to follow more closely the analogy of good teaching.

WE SHOULD STUDY THE PECULIAR NEEDS OF OUR TRACHERS AND SUIT OUR INSTRUCTION TO THOSE NEEDS.

It was with this conviction in my mind, that, as a School Commissioner, I conducted "Teachers' Drills" of three-day sessions at different points in my district. The same truth is to me one of the justifications for City Normal Classes or Training Schools. I believe that in the lack of this specialization lies the cause of much of the complaint against our Teachers' Institutes. I would not be understood as disparaging in the slightest the splendid work the Institutes are doing for the schools of the State. But assemble 300 or 400 teachers of a county

*Portion of an address read at the recent meeting of the New Tork State Teachers' Association at Saratoga.)

into an Institute. They will represent all grades of teachers. Talk on general principles, and many will go away with the remark that they came to learn how to teach not to be lectured. Present specific methods, and the country teacher will quite likely say, "Oh, that is too great a change. I could never use such methods in my school," while the teacher from the large graded or city school would say, "That method is the same as we now use," or perhaps, "We once used that, but now have advanced still further." Is not this true? Have you not heard, if not made, such remarks? Where lies the remedy? I do not know. It may be that the Institute has a peculiar province which we should recognize, and where this difficulty does not exist, or it may be that the remedy is in graded Institutes. To the specialists in Institute work it is my duty to leave the solution of the problem.

STRIVE TO GIVE POWER RATHER THAN DICTATE PAT-

Who has not, when comparing the language of our self-confident, dogmatic pedagogue with the language of a Spencer, an Agassiz, or any equally great scholar, and noting the positive dicta of the one and the modest statements of the other, blushed for our profession? The spirit of the new Education rightly insists that the dictator, the dogmatist. has no place in the true school. And yet we teachers of teachers, all as a body, whether Commissioners, Superintendents, Normal School Professors, or Institute Conductors,-stand before a class of young people already, or about to become, teachers and lay down our dogmas with the positiveness and self-confidence of the most characteristic pedagogue of "Ye olden time." By opposing such dogmatism, I offer no plea for indefiniteness or looseness in the training of teachers. I simply suggest that we drop our authoritative manner and dictate fewer patterns that must be followed, and instead cultivate in ourselves and thus inspire in our class the true spirit of honest inquiry, lead and urge them along the path of such inquiry until they shall discover for themselves some principles of teaching, until they can use these principles in criticising the models of teach ing recommended by others, or in modifying these and devising new ones of their own.

TEACHERS MAY BE DIVIDED INTO TWO CLASSES; THOSE WHO TEACH FROM PATTERNS AND THOSE WHO TEACH FROM PRINCIPLES.

In the former we see slavery; in the latter, growth. Recognizing that that only can be called superior teaching which is consciously directed in accordance with known educational principles, the problem with me has been how to use these principles in the training of teachers, so that the teachers shall become able to make them practically effective in their daily work. I am not sure that I have completely solved the problem, though I believe the course pursued has been productive of good results.

ONE GREAT SECRET OF A YOUNG TEACHER'S REAL ADVANCEMENT IN HIS WORK.

He may read descriptions of, or even see, much good teaching; but if he attempts to slavishly imitate it, failure is almost certain. Hardly less certain is his failure if, not understanding the principles upon which that good teaching was built, he so modifies the method as to antagonize the very principles which made it superior. The power to see or read a good method, discover the principles underlying it, and infuse into it one's personality without contravening those principles is a power much to be desired. If, in our training of teachers, we can secure in them this power, we will have done much toward making them progressive and successful teachers.

INEXPERIENCED TFACHERS NEED SOME DEFINITE PLAN AND MODEL WITH WHICH TO BEGIN ACTUAL TRACHING.

It is right here in the course of training that such model methods can best be given. As we examine and test different methods, we shall find some that must be pronounced good. These are carefully explained and very minute directions given for their use. Thus, while aiming mainly to give them

power, we do not leave them without concrete models that they can use in their schools.

Perhaps the highest characteristic of a skillful teacher is the power to observe and follow the workings of the individual child's mind when under instruction. A difficulty is met by the child. In the teacher's effort to have him overcome it, he is the skillful teacher who can follow the working of the child's mind, note the need of a stimulus here, mark the effect of a hint there, and thus so guide the pupil that the pupil shall come out of the struggle stronger and better. In the training of teachers I do not know as we can do much toward giving them this power; but we can at least lead them to see what it is, and to realize its immense desirability, and often we can inspire them with the determination to strive toward that high plain of intelligent teaching.

THE THEORETICAL COURSE OF TRAINING FOR THOSE PREPARING TO TEACH SHOULD NOT OMIT SOME STUDY OF THE HISTORY OF EDUCATION, SCHOOL LAW AND SCHOOL ECONOMY.

As the most valuable part of a person's medical study is in the hospital, so the most effective part of a teacher's training lies in the practice school.

A school regularly set apart and known as a practice school, is by no means a necessity, though a great advantage in connection with any training class.

Any of your regular schools will answer nearly all purposes. But into some such school I would have every member of the training class enterfirst as an observer, then as an actual teacher, but under the immediate and personal criticism of an experienced teacher. I saw it very sharply questioned somewhere, that if we make so much of the principle that "children learn to do by doing," why do we not apply it also to teaching, and let young persons learn to teach by teaching? In ananswer to this, I offer only two statements. First, young people of the age required to become teachers have minds sufficiently matured to pursue and understand a course of preparatory study that shall make their doing much more effective, even at the very beginning. Secondly, as the child, in order to do well, must do a great deal, under careful observation and direction, so we would have the teacher learn to teach well by teaching much under close supervision and criticism.

In conclusion allow me to submit a brief resumé of the points I have endeavored to make.

FIRST—THERE IS A NECESSITY FOR THE NORMAL TRAINING OF TEACHERS.

In this training I find many agencies at work, all needed and each having its special work which it, better than any other agency, can accomplish. As to what this training should embrace and how it should be carried on, I find wide diversity of opinion. To awaken thought, to help forward some future construction of a complete system, I submit results of my study and experience in this field.

In the training of teachers we should follow more closely the analogy of what we consider good teaching of children.

To do this we should tell those in training nothing we can lead them to discover for themselves.

We should study the special needs of the teachers and suit our instruction to those needs.

We should strive to give them power rather than patterns.

We should dogmatize less and inquire more.

We should develop principles of teaching, and train the teacher to apply these in testing and modifying old, and in devising new, methods.

We should leave with them some definite and specific methods for teaching the common branches.

We should lead them to realize how important it is that the teacher should have the skill to observe and guide the workings of the individual pupil's mind.

We should teach something of educational history and school law, and much of school economy.

We should inspire them with a deep sense of the responsibility and nobility of the teacher's work. Finally we should never fail to supplement this

theoretical training by an extended course of observation and practice teaching under competent and immediate supervision and criticism.

THE VALUE OF TEACHERS' EXAMINA TIONS.

By JAMES M. MILNE, PR. D. Cortland State Normal School.

(Remarks made at the recent meeting of the New York State Teachers' Association at Saratoga.)

In determining the value of examinations for teachers, it may assist us if we consider what is the province and work of a teacher. He may teach subject matter, may train the mind to grow, may develop powers by intellectual processes, but the surest product of all his teaching will be himself, his character. Soul power cannot be measured by examinations and only partially by contact. We talk too much about examinations and too little about manhood? Our requirements will be the suggestions to those fitting themselves for teachers. Our great stress on examinations tends to surface preparation and veneer.

No such bias should be given as shall encourage the putting on of scholastic attainments and methods, as we put on garments. The vital element is soul. I fully believe that were Socrates living today he would be a great teacher, for aternal principles were the foundation of all his works. Do not understand me to undervalue or despise methods. I value them so highly that I would not have them abused. All proper growth is from the inside out, not from the outside in. We must master methods else methods will master us. The former condition brings greater strength, the latter greater weakness.

Yet we prate too much about the method rather than a method based on principles of everlasting right. Methods may be many, although principles are few.

Any general system of examinations that place much stress on scholastic attainments or triteness in pedagogic aphorisms should be heartily opposed. What we need is examinations that will measure scholarship; practice that will prove the method; but more than that, we need careful, conscientious oversight that will determine the character, the manliness, the soul power of the teacher.

HAVING A MISSION.

A Queens County teacher, who visited the schools of Quincy in 1882, writes: "These teachers seem to have a mission; they teach from a different standpoint than others; they are looking at some object that is far off, and seem to be striving to get nearer to it."

No teacher, no preacher, no artist, no worker in the higher fields will succeed who does not have a "mission"; and that mission must not be to make money, either. The moment the teacher feels that he chooses a path because there is money in it, that moment he is in a slippery path, and his downfall is not far off. He must feel that his course is the best, money or no money. Some of the grandest work done in the world will be done in the wayside school houses of our country this fall. Some of these teachers will do a work that will last a long time; not because they are wiser than others, but because they feel that they are sent on an errand by the Almighty to that district. If a man 'guesses he might as well teach school," his attitude is wrong, and the work cannot prosper under his hand. He must undertake it because he knows he can do it; because it is work that ought to be The poet Longfellow tells us that the sculpdone. tors of the ancient temples wrought the inside of the blocks of marble as finely as that which was to be exposed to the eye, "because the gods see everywhere. Therefore let no one feel that his work is unimportant because his school house is in a remote and desolate country; a teacher who does not teach his best because he is in a poor building or among ignorant pupils, is unworthy of his calling.

Tattended a Quaker meeting several years ago, and not a word was said by anyone; all sat in silence. "Why did not some one speak?" I asked as we rode homeward. "Because, friend, none of us had anything to say." No one should teach who does not feel that he has something to tell his pupils. Not that he has a certificate from the commissioner; not that he wants the money; not that it is easier work than farming, but that he can be of real service to those who will come into that school-house. Let him enter the school-room each day with this feeling; let him think over the needs of his pupils; let him determine to supply those needs

The new teacher may look forward with dread to meeting and combatting with disorderly pupils. Let him dismiss these thoughts and consider another aspect of the case. Let him consider what he has to give to those pupils. They are looking for bread; has he bread to give, them? The thought that must be uppermost is, In what way can I benefit those pupils socially, physically, morally, and intellectually? No technical knowledge of grammar or arithmetic will do; he must be able to feed a throng of bright, eager, expectant children that will stand before him hungering and thirsting for some being to comprehend them, and minister to them; and are these asking, "Is this the being I saw in my dreams ?" That teacher who has a mission will know how to meet these young immortals.

A GOOD RECITATION.

No method of reciting is so bad as to be entirely devoid of some good. The best requires the pupil to do all that is possible for himself. It holds his attention, governs his impulses, develops his sympathy, influences his habits, increases his memory, and adds to his stock of knowledge. Few recitations do all of these things. Any method is good that requires the learner to investigate and judge for himself. It aims not so much at finding out how much the pupil knows, as how well he can express what he knows, and then, by skillful questioning, shows him how he can learn much more. Its results are encouraging and stimulating.

A GOOD RECITATION DEVELOPS AND HOLDS THE QUIET ATTENTION OF THE MEMBERS OF THE CLASS.

In some cases the quick and active receive nearly all the time of the teacher, while the dull and backward are ignored and remain idle, unless through want of occupation and interest they manufacture some business on their own account. In many classes a few do all the work; the majority are left to get what they can or remain ignorant. Usually they remain ignorant. A pupil not giving attention is the one that needs the teacher. The brilliant scholar who can answer all the questions is likely to receive great opportunity to show himself. Especially is this the case in an oral examination, when the object is frequently to make the class "show off." The bright pupils are brought to the front, while the dull ones are carefully kept in the background.

A GOOD RECITATION SECURES QUICK ANSWERS:
But it does not permit the pupils to snap their fingers, shake their hands and beat the air whenever a question is asked. Any method of permitting children to show by violent signs their willingness to answer a question or tell a fact, is exceedingly bad. It creates nervousness on the part of the one who is trying to answer, and often stands in the way of a timid and backward child's progress. It is not uncommon to hear a teacher say: "Come! be quick! You see how many are waiting to answer!" The child knows, but in the turmoil of the moment the knowledge cannot be brought into expression. This method has appropriately been called a "cheap sort of competitive recitation." It is certainly miserable if not "cheap."

A GOOD RECITATION SECURES ORDERLY QUESTIONING FROM THE PUPILS.

Disorder always leads to failure, and nowhere quicker than in the recitation. Questions in the class are continually running off into irrelevant subjects, and unless they are quickly disposed of will destroy the recitation. "Stick to your text"

is as essential to the teacher as to the preacher. In some classes the pupils understand the weakness of the instructor, and whenever a difficult point is presented ply him with questions that will lead him to talk on some favorite theme. The pupils show unusual interest, but laugh heartily at the teacher's blindness and their smartness as soon as they are out of his sight. Sometimes a loquacious child has all at once an idea. It overpowers him; he shakes his hand until he is permitted to talk, and when he does express himself, goes off into some irrelevant narration or harangue. The successful questioner holds his class to the subject and suppresses at once, kindly but firmly, all side issues until the end is reached.

In a successful recitation the teacher knows before he commences what he wants to teach, and he never "lets up" or deviates from the main object until this result is obtained. He holds to it with a tenacity of purpose and a fixedness of determination that no power in the class can shake. It is with him this or nothing, if not to-day, certainly to morrow or some day. The class comes to understand this, and after a while gives him the attention they know he will obtain.

THE SCHOOL-ROOM.

For the SCHOOL JOURNAL.

EASY EXPERIMENTS. VIII.

BY G. DALLAS LIND, M.D.

EXPERIMENT 23.

Materials Used.—Rubber tube; two vessels holding a quart, or more; water.

Suggestion. —A rubber tube two feet in length and the thickness of the little finger can be bought for 25 or 30 cents. It may be used for several experiments, yet to be described.

Manipulation.—Fill the tube with water by immersing it in a vessel of water. As you take it out hold both ends between thumb and tinger tightly, to retain the water. Now put one end in a vessel of water, placed on a table, and let the other hang over the side of the vessel. Remove thumb and finger from each end and place a second vessel on the floor beneath the free end of the tube.

Result.—As soon as the tube is opened at both ends the water begins to flow and will continue until the vessel is empty, provided the end in the vessel is at the bottom and the other end is on a little lower level. A tube thus arranged is called a siphon, and is familiar to most persons.

Principle.—By reason of its weight and mobility, air presses equally in all directions with a certain force. The pressure on the end of the long arm of the siphon is the pressure of the air diminished by the weight of the short column of water. Since the weight of the water in the long column is greater than that of the short column, the pressure of air must be greater on the short column and the water will be driven up.

Note.—A "jimpson weed" stem will make a good siphon. Cut off the stem just below a fork and with a wire open a hole at the joints so that the two arms may communicate. The hole in the main portion may be stopped with clay. A siphon which will illustrate the principle may thus be made with no expense whatever.

EXPERIMENT 24.

Fill the siphon as in Experiment 23 and place one end in a tumbler of water placed on the table, and the other end in another tumbler held in the hand. Now, take a tumbler in each hand, and hold one higher than the other, and when the water has nearly all passed from the upper tumbler, raise the lower one until it is higher than the other. The water will flow back again into the first tumbler. This changing of level, or in other words reversing the positions of the long and short arms of the siphon, may be repeated many times, observing that the water always flows from the higher to the lower level, although it must ascend before it descends.

EXPERIMENT 25.

Materials Used.—Flat tin oyster can, bit of wire, a string, a pail of water.

Apparatus. - The oyster can must have the open

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ments, ments, one m purpos them s ure wi ing made at the top, or narrow end. Near the bottom at one corner on the broad side make a hole with an awe or nail about an eighth of an inch in diameter, and a similar hole on the other side, at the corner diagonally opposite. Fasten the bit of wire to the top of the can in the manner of a bail to a bucket. Tie the string to the wire, and the apparatus is complete. Preserve it for future use.

Manipulation.—Fill the can with water by im-

mersing it in the pail of water. Lift it by the string until it swings clear of the water.

Result.-The can will immediately begin to rotate and continue until all the water has run out. It will rotate in a direction opposite to that of the streams flowing from the holes.

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Principle.-This apparatus works on the same principle as "Barker's Mill" which is described in most text-books on philosophy. Liquids exert pressure equally in all directions. At the point where the hole is made there is no pressure because it is relieved by the water flowing out, but at the point opposite there is pressure, hence that part of the can will be moved away from the ori-At the other end of the can the hole being made on the opposite side the pressure is in the opposite direction, hence the can rotates on its long

Note .- "Barker's Mill" is often called the "Reaction wheel" but I think erroneously since there is not reaction of the stream of water. It is more properly called the "Unbalanced Pressure Wheel."

Remark.-The teacher should study thoroughly the principles of pressure in liquids. In this case the pressure is caused by the weight of the water. The deeper the water then, the greater the pressure and the more rapid the rotation.

EXPERIMENT 26

Materials Used .- Quinine bottle, or similar widemouthed bottle, two glass tubes (see note on experiment 28), about 4 inches long, a cork to fit bottle, a short rubber tube which may be drawn over the glass tube, a cup of water.

Manipulation.-Draw one of the tubes out to a fine point by heating in a lamp. Make two holes in the cork, through which pass the tubes. Let the one which is drawn to a point extend with the point end into the bottle about an inch; the other tube about three-fourths of an inch. Invert the bottle, placing the outer end of the pointed tube in a cup of water. Draw the rubber tube over the end of the other tube, and placing it in the mouth, exhaust the air from the bottle by suction.

Result.-The air being partially exhausted from the bottle, the pressure on the outside will drive the water up the pointed tube, creating a fountain in the bottle.

Modification. - After the fountain has been working a minute or two, take off the rubber tube and allow the water to run out through the plain tube. This will tend to cause a vacuum again, and the pressure of the air outside will continue to drive the water up the pointed tube as long as the latter is under water.

Caution .- See that the cork fits very tightly and that air cannot enter where the tubes penetrate the cork. It will be necessary to use bees-wax, tallow, plaster of Paris, or clay to make the cork air tight.

EXPERIMENT 27.

Materials used. -Same as in experiment 26.

Manipulation. - Reverse the position of the fountain tube; that is, place it with the point outside the bottle, and its other end reaching nearly to the bottom of the bottle. Fill the bottle about two-thirds full of water. Blow with the mouth into the rubber tube.

Result.-The air in the bottle will be compressed. and, acting on the water, will drive it up the other tube, and a fountain will be created outside the

Note. - Druggists sell what are called "sick tubes," which will answer for the above experi-ments. These tubes are about ten inches long, and one may be cut to make the two for the present Glass tubes may be severed by nicking em slightly with a file and exerting lateral pressure with the thumbs and fingers. In this case,

since one of the tubes is to be drawn to a point, it will be best to divide the long tube into two parts and gullies, explaining why they were so formed: at the same time the ends are drawn out. This is done by heating the middle of the long tube in the flame of a lamp (a spirit lamp is generally used but a common coal-oil lamp will do, only it will take longer) until the glass is soft, then pulling suddenly upon each end. The pointed ends may then be cut with a file to the proper size.

For the SCHOOL JOURNAL

READING OR WORD NAMING.

A county superintendent in Illinois writes: have been pained many times to see a row of boys and girls stand before the teacher and set naming the words in their reading books; nor could the teacher pass beyond that step; it was always word-naming and never reading. And after studying the case over, I have ever found that uch teachers were defective in language culture."

This is a correct statement. You cannot make a good teacher of reading of one who does not understand language. A young man was lately observed in the school-room; it was his second term. He managed his second reader class in a very bungling manner; the pupils merely called off the words, their minds evidently on something else; they gained no ideas. Watching the teacher it was seen that his articulation, accent, pronuncia-tion, and penmanship were of the lowest order. He wrote a sentence on the black-board in a style that must have sunk him in the opinion of the school; he misspelled one of the simple words. "No wonder that he has such a reading class," was the comment; he does not comprehend the language he speaks; yet he was an American and a respectable looking young fellow. That school will go on "naming words" all this winter, instead of reading; they will be disorderly because they cannot read-for the human being loves to read-for reading means advancement, growth, enjoyment. Reading means thought-grasping, and is like the art of playing ball, or skating; it yields pleasureable results. Why is it that teachers fall into and stay in this word-naming rut? Is it ignorance? It undoubtedly is. Says Webb, the originator of the natural or "word method": "It is amazing what efforts are made to prevent reading on the part of the pupil. In visiting schools I have been obliged to say, Let the pupils alone, they will read if you only give them a chance."

Hear the natural, easy and impressive talking out of school; hear the drawling, mechanical, meaningless reading in the school; yet they are parts of one and the same thing. Word-naming is not a step towards reading; it stands in the way of reading.

MOULDING IN SAND.

A METHOD OF TEACHING GEOGRAPHY.

Moulding sand is now employed in teaching the young idea how to shoot. "It may properly be called the first lessons in geography," said Superintendent Cole, of Albany, recently, as he stood watching the deft fingers of sixteen pupils from school No. 24 mould and pile up the sand before The exercises were conducted in the high school building for the edification of the third grade teachers. Miss Julia Cordell conducted the lesson. This plan of illustration requires that each scholar be furnished with a large flat tin, probably 12x18 inches and three-fourths of an inch deep. The quantity of moulding sand for each pupil is two or three handfuls. The teacher is provided with a moulding table, with a cover arranged to be raised at any desired angle. In the top of this table is a quantity of yellow sand.

Miss Cordell began the lesson by moulding the ground plan of School No. 24, making the doorways, the yard, and the street in front. She showed the directions from the building to the various parts of the city and to the public buildings, by questioning the children. When she had finished her model, lo and behold! there were sixteen similar models in front of the pupils. Next, Miss Cor-

and gullies, explaining why they were so formed; the value of the water-sheds; why valleys were fertile, and the reason why the snow remains on mountain peaks. The bright tin answered for the water of the lakes, or the streams along the valleys. One of the most interesting models was that of the Hudson River, showing its source in the Adirondacks, with its mountainous surroundings, the Mohawk River flowing into it further down, and the topography of the country along its course to the mouth, with the larger cities indicated.

One little bright-eyed youth moulded on the taole a representation of Albany county, showing the elevations of land, the Hudson River, the Normanskill, the Patroons, and other large creeks, and the Helderbergs, with Thompson's and Warner's Lakes in their peaks. "The idea is being developed be fore the pupil gives his answer to a question," said Mr. Cole. "I think it is a first rate thing, and one that will prove of untold value in giving the beginners in geography an idea of what a hill or a valley, or mountain, or island, or river, or lake is." There were about 100 spectators present, all of whom were loud in their praises of teacher and class." The experiment has been going on in School No. 24 during the past three months. The superintendent hopes to be able to have the plan introduced in all the schools by the fall term.-From an Albany Paper.

For the SCHOOL JOURNAL.

PRIMARY LESSONS IN PHYSIOLOGY.

BY ANNA JOHNSON.

JOINTS.

HAVE THE SCHOLARS FIND SOME PLACES IN THEIR BODIES WHERE THE BONES ARE JOINED TOGETHER.

What are such places called ! Have some one open and shut a door. How does the door work or hang, so it can move easily? Find some joints in the body that move the same as the door. What may we call such joints ! Find all the hinge joints in your body that you

Let two scholars turn a rope. How did your shoulder joints work? Did they work the same as your elbow? Have a small shallow cup or bowl, with a ball fitted in, or make a hollow with the hand, and show how the ball can work in it. Tell them the end of the bone is rounded like a ball, fits into a hollow place in the shoulder, works in a similar way, and is called the ball-and-socket joint. Can you find any other ball and socket joints ? If they cannot, let them swing their legs, and find out in that way. Next have them move their wrists and ankles and find the rolling joints.

PRESENT A SKULL OR PICTURE OF ONE, AND LET THE PUPILS SEE HOW THE PARTS FIT IN LIKE TWO SOOL-LOPED OR JAGGED SHELLS. Do these joints move?

What may they be called then! Of what use are they if not moveable ! Illustrate by the panes of glass in the window. If a stone is thrown at a window, which has but one large pane, how much of the window would be destroyed ! If the window be compused of many small panes, how much of it would be de stoyed! Why is it well that the skull should be made up of several pieces instead of one. Tell them in the baby's head the parts are not joined, but are quite separate, to allow many jars and bumps without injury.

Speak of the back-bone, and show that its joints are different still.

What is done to machinery to make the parts move smoothly ? Tell them there are little oil bags by all the joints which are self-acting, and keep the bones nicely oiled.

When people are packing glass and china ware, what do they place between the pieces? Why? Do your bones jar against each other when you jump! Tell them about the soft cushions that are placed between the joints to keep them from jarring,

TABLE TALK.

A publisher of text-books in this city said lately, "I am surprised at the prevalence among the teachers of a desire of getting something for nothing. The principal of a school at N—— made a practice of asking for books from us; now a reader, now a geography, and so on, until he had quite a package of new books. These he took to another publishing house and sold. At institutes where we exhibit books we expect at least one-half will be carried off—the ladies help in this matter. Oh! I could tell you some queer stories about how our books are "carried off."

We had a letter from a man in —; he wanted a reader or two; he would use them in his school. We sent them; other books were wanted; we sent them. Finally, he wanted a Latin Grammar, etc. We asked our traveling agent to stop at — and see this man. After some effort he found him: he was a pupil in a normal school. The agent made out a bill for eight dollars' worth of books and told the young man to pay it or he would be prosecuted. It was paid.

Then a Reverend teacher, at least one who writes "Rev." before his name and keeps a school, wanted to introduce our books—that is, exchange the books he was using for ours. We sent him a box of books and he sent here a lot of stuff—readers and spellers, geographies, etc., old, battered, worn, such as were in use a quarter of a century ago! Where he picked them up 1 cannot tell, but probably in some cellar down town. A few days after, the box of books we had sent was sold by him to another publisher! He buys old books for a song and exchanges them for good ones; a pretty business for a "Rev.," is it not?

But there are exceptions. There are teachers who will not have text-books given to them. They say: "I get pay for my work, and you must have pay for yours." But after all these are the exceptions. A few county officials follow the usual course. As soon as elected he notifies all the publishers, and asks for a "set of text-books for examination; if pleased he will recommend them."

The publishers of this paper thought as they listened that the teachers' profession ought not to be smirched after this fashion. They receive from no small number of persons during the year requests for "Talks on Teaching," "Quincy Methods," for nothing, postage paid. Various reasons are assigned: "Want to examine; if pleased will buy;" "will recommend them to others," etc., etc. The publishers refuse all of these of course; they publish books to sell them. They have found that the men who can help the sale of a book are not likely to write and say so.

Brethren, reform this getting of books for nothing.

From the most doleful subjects often come the most ridiculous circumstances, and we are made to laugh in spite of ourselves. Such an event occurred in connection with the recent draping of our City Hall. Our Commissioner of Public Works composed some verses and posted them up in a most conspicuous place, over the entrance. Here they are:

He bore aloft our sword of fire,
A world-watched, envied nation,
Where victory sang—while trembling kings
Bespoke our desolation.

No faltering marked the Titan's task, No shrinking from the trial, He faced the foe, ere Freedom's hand Fell shattered from Time's dial.

The metaphors are much mixed. "Freedom's hand" falling "shattered from Time's dial" is wonderful. The poet of the World has added this stanza:

There is no gleanin' his hidden meanin', So like one bean in a peck of soup; And every guesser and wise professor Can do no less, sir, than give it up.

The Independent has composed another. It reads thus:

The genius of New York has not expired,
Its last creations show it;
See on the City Hall the verse admired
Of Squire, the poet.

We have a poetical machine in our office that moved itself to grind out the following:

New York has a poet,
And she ought to know it,
But it's doubtful if she does;
He went and wrote it,
And then he nailed it
Above the court house doorss,

And when men read
What he said,
They stood amazed, confounded,
That a man should dare
To compose such bareFaced verses about the dead.

FOR THE SCHOLARS.

IN MEMORIAM.

A SYMPOSIUM.

Alysses S. Grant.

BORN APRIL 26th, 1822, DIED JULY 23d, 1885.

These selections can be variously used as a school exercise. Some should be memorized and recited, others declaimed. Some may be written or printed on the black-boards and repeated in concert, and others, especially the anecdotes, can be read by the teacher, and used as a reproduction exercise. A few can be read to pupils from this paper. Each teacher must be his and her own judge as to the best way of using the most valuable material here presented to our readers. It is not essential that the order here given should be followed.

I, INTRODUCTORY.

The foremost man of the nation has closed a career second to no other in the history of the Republic. The victorious leader of the nation in the greatest war of modern times, he was also a leader of the people in civil life. Perhaps no single act of Washington's Presidency was more pregnant with blessings for the nation than President Grant's unflinching defence of public faith and honest money, just as no military achievement in our early history surpassed in splendor the taking of Vicksburg, or in results the fall of Richmond. Greater statesmen than President Grant the country has known, and men more capable of wisely leading public opinion. But to him, both as statesman and as soldier, the country owes a debt of undying gratitude. All men have faults, and he was not exempt. But a thankful people would gladly forget them and remember only the great deeds and the noble traits of character which remain for the admiration of mankind.

II.

THE ESTIMATE OF THE FUTURE.

A thousand years from now, when bistory, by those processes by which it compresses, as time passes by, only the salient events and the men upon whom they hinge-a thousand years hence the only men of this great era who will be remembered, will be Abraham Lincoln and Ulysses S. Grant. We who went through trial and storm, who were familiar with all that transpired, will carry to our graves the memory of the great statesmen who were with them and the great generals who surrounded them, but it is the verdict of all history that the only man about whom history turns is Ulysses S. Grant. It illustrates in a thoughtful way, the overruling Providence which guides the destinies of this people, that no matter how great the price is, no matter how mighty the emergency, from unexpected quarters the men come who can take the country safely through and bring triumph out of disaster. From two quarters in the West the most unlikely places for states-men or heroes, came Lincoln the President, and Grant the Soldier. As I look at it, neither would have succeeded without the other, but to them, both together, we owe the country as we have it to-day.

of ideas Brief SELECTIONS.

III.

There is no death for such as he.
When slow transition endeth agony;
His battles fought, his duties done,
His country's life by valor won,
The change is but a soldier's reveille
To greet the morn of immortality.

IV.

The Conqueror of a hundred fields To a mightler Conqueror yields; No mortal forman's blow Laid the great Soldier low; Victor in his latest breath— Vanquished, but by Death.

Tear from out the heart of Hampshire,
Granite that will stand for years,
'Gainst the tempest, in the sunshine
And the rain of angel's tears.
Write the record of his glory,
Deep cut letters over head,
Tell his grand historic story;
He that sleepeth is not dead.

VI

Dead! the grim word through all the earth doth fly
To bear its baleful utterance afar;
That warrior soul, whose calm, unflinching eye
Surveyed the shock and circumstance of war,
And when defeat drew ominously nigh

His sword smote down disaster. Naught can mar The work he wrought; the flag he left shall fly Its folds ablaze with each resplendent star— Dead? Nay, the word but iterates a lie: Who saves a nation's life, himself shall never die!

VII.

Not by the ball or brand Sped by a mortal hand, Not by the lightning stroke When flery tempests broke— Not 'mid the ranks of war Fell the great conqueror.

Unmoved, undismayed,
In the crash and carnage of the cannonade—
Eye that dimmed not, hand that failed not,
Brau that swerved not, heart that quailed not,
Steel nerve, iron form—
The dauntless spirit that o'erruled the storm.
While the hero peaceful slept
A forman to his chamber swept,
Lightly to the slumberer came,
Touched his brow and breathed his name.
O'er the stricken brow there passed
Suddenly an icy blast.
The Hero woke. Rose undismayed;
Saluted Death—and sheathed his blade.

VIII.

Pile ye high the noble granite
O'er his lowly lying head;
Let it point our youth his duty
To the living and the dead.

IX.

Forgotten is the sword. The bugle's blast
No more recalls fierce memories of the fight;
Faint echoes only, through the voiceless night,
Come softly floating from the muffled past:
Life's lowering flag is almost furled. At last
Hope spreads her wings for her departing flight,
And on the darkening fields the lingering light
Of days declining wearily is cast.
A deadlier battle now is waged—and now,
The arm of Victory to the shoulder bared
Strikes, from the opposing side, the dauntless brow
Which War's red hand and Slander's fang hath spared.
But Honor writes on Glory's shield his name,
And by his side still stands unconquered Fame.

X

HOW HE MET PRESIDENT JOHNSON.

President Johnson was anxious to carry out a policy of bloody revenge. He summoned General Grant and told him that he wished the army to be employed to arrest the members of the rebel administration, the rebel congress, and rebel state governments, as well as the rebel army and naval officers. "I intend to hang every mother's son of them," said the President. "I will not employ the army for any such purpose," replied General Grant, "nor will I let it be employed for any such purpose." "But," said Johnson, "I am by the Constitution commander-in-chief. What will you do if I give you such orders!" "Disobey them," quietly rejoined Grant, "and state my reasons to Congress and the country. The soldiers of the South accepted my parole which, by the laws of war and of the United States I was authorized to give. It guaranteed that they should not be molested if they laid down their arms, went home, and obeyed the laws. They did so. I will stand

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"Fro Longsti was a m in the l iaithful When i mond w for trea by that parole, and the first court martial you order would be one to try me, for I will not issue such orders as you suggest, and I will issue orders against them, for the purpose you state." This reply, so wise and so firm, put an end forever to the plan of revenge.

XI.

THE ELEMENTS OF HIS SUCCESS.

The dogged determination to do or die, which was so characteristic of Grant, was what gave back-bone to the Federal Army. He would never acknowledge defeat. Gen. Zachary Taylor once told an anecdote of Grant, which occurred during the Mexican war. Lieut. Grant was in charge of a party of men detailed to clear the way for the advance of boats laden with troops from Arkansas Bay to Corpus Christi, by removing the oyster beds and other obstructions. Failing either by words or signs to make those under him understand him, Lieut. Grant jumped into the water, which was up to his waist, and worked with his men. Some dandy officers began to make fun of him for his zeal, when Gen. Taylor came upon the scene, and rebuked it by saying:

'I wish I had more officers like Grant, who would stand ready to set a personal example when needed."

XII.

AN INCIDENT DURING THE WAR.

The clamor for Grant's removal grew louder than ever before. Even Senator Washburne, his friend, grew lukewarm. Mr. Lincoln said afterward: There was a time when I stood almost alone in upporting him." The North was tense with supporting him." anxiety, and the Vicksburg debate went on in every shop and at every street-corner. In one Cincinnati store, an old man who had listened to a good deal of the talk said quietly: "I think he'll take it." There was a curious air of confidence in the way it was said. "Yes," continued the old man, "he'll take it. 'Lys' always did what he set out to do. You see, 'Lys' is my boy." With each delay and failure the storm of clamor rose higher. But Lincoln, slow and wise as always, said: "I rather like the man. We'll try him a little longer."

XIII.

HIS CHARACTER.

In the later years of his life, and particularly in business affairs, General Grant showed the same inaccuracy in the judgment of men with respect to other than military duties, and the same silent, uncomplaining and heroic endurance of the burdens resulting from mistaken judgment. He was easily deceived, and was the ready prey of design-ing flatterers. Whoever wished could gain his confidence by adulation, and could then turn him rehemently against another by the flimsiest of misrepresentations. He was not gifted in business. He lacked the qualities which make men success ful in getting or in keeping money. He could save a Nation; -he could not save himself or his family from the knavery of a Ward.

XIV.

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General Grant was thoroughly and naturally an American. And now we find that the people loved him for just that. They might have admired his military genius. They might have been grateful for his services to his country. They might have vondered at the unusual combination of personal traits with the marvellous events of his career. But they would never have felt that peculiar sense of personal nearness to him—that restful satisfaction in the contemplation of him as a man-had he not been simply and unaffectedly an American.

"From what I have already told you," said Gen. ongstreet, in an address, "it will be seen that Grant ras a modest man, a simple man, a man believing n the honesty of his fellows, true to his friends, aithful to traditions, and of great personal honor. When the United States District Court in Richand was about to indict Gen. Lee and myself or treason, Gen. Grant interposed and said, ·I

have pledged my word for their safety.' stopped the wholesale indictments of ex-Co ate officers which would have followed. He was thoroughly magnaminous, was above all petty things and small ideas, and, after Washington, was the highest type of manhood America has produced."

XVI. HIS WRITINGS.

Gen. Grant's writings are like his sturdy, direct, uncompromising, and earnest character. He never indulged in ornament, in humor, in hyperbole, or persiflage. He knew what he was called to say. what he wanted to say, what his inspiration dietated that he should say, and he said it in the few est possible words that would convey his meaning intelligibly to others. There never was a man who enwrapped so much meaning in so few words. He was an oracle in his sententiousness, but not in the uncertainty and cloudiness of his sayings. His sentences are apothegms; his words are the voices of wisdom.

The burial-places of great men are not and can not be measured by the rules which apply to the interment of ordinary people. Their tombs are historical monuments, trophies, and examples. Every art effort expended on their decoration is an expression of the national desire that the memory of the dead shall live, and that his deeds shall be honored for all time. To demand privacy for such a grave is to miss the plainest teachings of human greatness. There can be no seclusion for the great, nor ought there to be. And whether they are interred under storied roofs, as in Westminster Abbey, or in simple homeliness as at Mount Vernon. the love and veneration of the people will follow and find them out, and their examples will speak to generation after generation. Where can a great man whose life has been devoted to the securing of popular freedom more fitly lie than in one of the gardens of the people, where they resort for rest and refreshment; where already the statues of other great ones dead are set up, where the beauties of nature conduce to sober contemplation, and where, because there is cheerfulness and the babble of crowds, there is none the less felt the deep beating of the people's heart.

Under death's shadow now the hero lies, Life's latest struggle ended, in the grave. Youth, manhood, age, have left us memories, Sacred and sealed forever, of the brave Strong captain, statesman, man who bore, Ever serene, a Nation's burdens, when Strife fraternal drenched with seas of gore States that united, to mankind, had been Guides from their labyrinthine prisons to the day. Restored by him again, there shines on high A light to guide the nations on their way. Nor shall his memory or glory die, Till fades that light in darkness and dism

These stanzas from Tennyson's ode on the Duke of Wellington are peculiarly applicable to Gen. Grant:

Bury the Great Duke With an Empire's lamentation. Let us bury the Great Duke

To the noise of the mourning of a mighty nation, Mourning when their leaders fall, Warriors carry the warrior's pall, And sorrow darkens hamlet and hall.

Where shall we lay the man whom we deplore? Here, in streaming London's central roar. Let the sound of those he wrought for, And the feet of those he fought for, Echo round his bones for evermore.

LIVE QUESTIONS.

- 1. Who were the "Pigmies"?
- 2. How are cablegrams sent and received ?
- 3. How may a ship at sea tell when an iceberg is approaching !
- 4. How can "a bird's-eye view" of a portion of country be obtained ?
 5. What is coraline?

 - 6. What was the "prayer of Ajax "!

EDUCATIONAL NOTES.

Contributions of news and notes are solicited from our readers. Those that state the thoughts expressed at differ ent meetings are more valuable than those that contain only names and dates.

ARK ANSAS

The Arkansas State Teachers' Association was held at Searcy, August, 25–36. The program contains, among other proceedings: "How to Secure Competent Teachers'—Superintendent W. C. Smith, Clarksville; County Examiner T. L. Cax, Clinton; Principal C. S. Cable, Camden; "Grading Country Schools"—Superintendent N. P. Gates, Fort Smith; Professor J. F. Howell, Fayetteville; Superintendent J. J. Doyne, Lonoke; "Object and Scope of School Examinations"—Professor H. B. Edmiston, Fayetteville; Principal C. L. Sampson, Washington; County Examiner I. C. Winton, Pollard; "Public Schools under the Law"—County Examiner Frank J. Wise, Pine Bluff; "County Supervision"—State Superintendent W. E. Thompson, Little Rock; County Examiner D. W. Edwards, Rally Hill; Principal J. W. Conger, Prescot; "Professional Literature"—Professor James Mitchell, Little Rock; Principal J. H. Shinn, Magnolia; Principal H. H. Parham, Jr., Little Rock; Principal Mrs. Fannie E. Suddarth, Mt. Vernon, and "Professional Ethics"—President W. H. Tharp, Searcy; Principal M. P. Venable, Booneville.

DAKOTA.

The first session of the Aurora Co. Institute began at White Lake Aug. 18, and continues until the 20th. Conductor, Prof. T. C. Clendenen. Instructors—Profs. T. C. Clendenen, J. Loughnan, Supt. S. B. Miller, and Miss Agnes Ryan.

A Teachers' Institute was begun in Quincy, Aug. 17, to antinue two weeks, in charge of Supt. Allison.

ILLINOIS.

The Southern Illinois Teachers' Association will be held at Greenville, August 25, 26, and 27.

The Putnam County Institute was held at Hennepin, Aug. 17-21. Prof. H. J. Barton, of the State Normal University, and Mrs. Ella Young, of the Skinner School, Chicago, were engaged as special instructors.

Prof. Edmonds has been engaged as Principal of the Hennepin schools, and J. W. Morgan re-elected in the Magnolia schools.

4

Hennepin schools, and J. W. Morgan re-elected in the Magnolia schools.

The annual meeting of the Illinois Principals began at Chicago, July I. J. N. Wilkinson, of Decatur, chairman of the meeting, spoke in favor of "Physical Education." He referred to the fact that the golden age of Grecian letters followed the age of muscular development. The Americans, as a people, are degenerating physically, and cannot fail to do so mentally, and said that it is high time our educators pay some attention to a development other than the mental.

J. M Greenwood, Supt. Schools, Kansas City, Mo., presented a paper on "Psychology and Teaching." Pres. J. W. Stearns, of the University of Wisconsin, read a paper on "Moral Education." It was no light prophecy of the future to see a college man meeting for the friendly discussion of educational problems in the common arena with public school men. Prof. J. L. Pickard, Pres. of the Iowa State University, presented a very practical paper on the "Relation of Superintendent, Principal, and Teacher." Principal O. T. Bright, of Chicago, and Principal J. W. Layne, of Danville, further discussed the subject. "School Economy" was the topic of a few remarks by J. W. Holcombe, State Supt. Schools, Indiana. Miss Sarah E. Raymond, Principal of Bloomington schools, followed with a short paper on "Ventilation and the Health of our Pupils." A distinguished visitor—State Supt. Easton of Louisiana—told the members of the discouragements the school men of his state had been obliged to contend against, but that the future was beginning to brighten.

INDIANA.

The St. Joseph County Teachers' Institute was held at Mishawaka, Aug. 17-21. Instructors: Prof. C. W. Hodgin, Principal of the Richmond Normal, Richmond; Prof. A. R. Charman, Assistant in Methods of Teaching in the Indiana State Normal School, Terre Haute; Prof. Alex. Forbes, of Chicago, formerly Principal of the Normal School at Cleveland, Ohio.

School at Cleveland, Onlo.

The Pleasant Lake Graded School begins its fall term of eight weeks Sept. 1, 1885. The winter term of twelve weeks begins Nov. 17, 1885. Prof. H. H. Keep is the Principal; Mrs. M. L. Graves has charge of the Grammar department, and Miss Mary Mounts the Primary depart.

Posay Co. Institute met at Farmersville, Aug. 10.

IOWA.

A new paper has been started in Des Moines, called the North-Western Journal of Education. Miss Ella Hamilton is the editor. The paper appears weekly.

Cedar Valley Seminary, at Osage, is to have a fine new boarding hall.

Prof. H. F. Kling, of Fayette, is getting out a course of study for the public schools. His energetic work has put over sixty volumes into the school library.

Dr. Bissell, who resigned the presidency of the Upper Iowa University at the June commencement, has been prevailed upon to remain at the head of the institution.

The summer session of the Chickasaw Co. Institute convenes in New Hampton, Aug. 17, for a two weeks' session. A strong corps of instructors has been secured.

Geo. Chandler, Co. Supt. in Mitchell Co., has been lected Principal of the Osage schools.

lected Principal of the Osage schools.

Bradford Township High School will begin its sixth year vith Prof. Levi Stout, of Adrian College, Mich., for its Principal. Miss Alice Green leaves the school, after two ears' carnest work, in the best condition it has ever

A little disturbance at Omer College caused twenty or thirty students to withdraw for a few days. President Hunt was in the right and was fully sustained. Students are back at work.

The Decorah Institute is enlarging its quarter

Two new buildings are being erected at Red Oak, at a cost of \$20,000. Prof. Kaufman is Principal. Floyd Co. Institute opened Aug. 17, for a three weeks'

The Normal Institute of Bremer Co. began at Waverly,

Aug. 11, and will continue until the 29th. G. P. Linn, Co. Supt. Instructors: W. F. Cramer, A. M., Didactics, Physiology, Drawing, and Penmanship: Prof. G. G. Sampson, Grammar, Geography, and Reading; Prof. E. O. Bennett, Arithmetic, History, Orthography, and Vocal Music; Miss Lucy A. Cameron, Primary Methods in Reading and Numbers.

The Guthrie Co. Normal Institute began at Guthrie Cen-r, Aug. 10, to continue three weeks. Instructors: Profs. C. Wildes, W. G. Ray, H. A. Field, and T. J. Mahoney. ter, Aug. 10 F. C. Wilde

P. C. Wildes, W. G. Ray, H. A. Field, and T. J. Manone Dubuque Co, began a two works' session at Dubuqu Aug. 17. Conductor, Supt. N. W. Boyes. Instructors Prof. Chas. G. Kretschmer, Prof. Thos. M. Irish, Pro W. J. Shoup, Prof. James E. Welsh, Dr. John J. Brown son, and Miss Anna Riland.

The Labette County Normal Institute commenced Aug. 3 at Oswego, and closed Aug. 28. Conductor, J. W. Weltner; Instructors—I. Tomlin and J. H. Hill.

The Cloud County Normal Institute began at Concordiang. 3. Conductor, G. W. Winans; Instructors—C. Mingsley, J. E. Vanderpool; Superintendent, T. W. Roach

KENTUCKY.

The McLean Co. Teachers' Institute will meet at Calhoun
Aug. 25 to 29.

The State Educational Association met at Monroe, ug. 11.

New Orleans underpays her teachers. The Pica tells of an "honored and successful" teacher who, af service of fifteen years, has to sit up half the night, se for colored women, to support herself.

MICHIGAN

Profs. W. D. Chybe and C. H. May held a Teachers' Relew Class at Lapeer, July 27-Aug. 14.

The State Teachers' Institute for Houghton, Keweenaw, and Baraga Counties began at Hancock, Aug. 17, and will close Sept. 4. Mr. W. J. Cox, Hancock, Local Committee. Osceola Co. Institute will be held at Hersey, commencing Aug. 31.

The Wayne County State Teachers' Institute was held at Belleville, Aug. 10-21. Mr. J. A. Sinclair, Belleville, Local

MINNESOTA.

Institutes will be held during the month of August as follows:

DATE. Aug. 94. Aug. 34. Aug. 31. Aug. 31. Aug. 31. T. W. Kirk, H. Witherstine, J. T. McCleary, Mrs. E. K. Jacques, C. W. G. Hyde, Miss S. E. Sprague, T. H. Kirk, Mrs. E. K. Jaques, J. T. McCleary, Miss S. E. Sprague, C. W. G. Hyde, H. Witherstine,

MISSOURT

The Daviess County Normal Institute began at Gallatin, Aug. 10, to continue three weeks. W. T. Pugh, County Commissioner, Manager, Instructors—B. F. Duncan and W. T. Pugh.

W. T. Pugh.

Audrain County Teachers' Normal Institute began at
Mexico, Aug. 17, and will close the 28th. Instructors—H.
M. Hamill, A.M., Jacksonville, Illinois, Conductor; H. A.
Gass, School Com. and Prin. Public Schools, Vandalia; D.
A. McMillan, A.M., Supt. Public Schools, Mexico; B. W.
Torreyson, Audrain County; S. T. Davis, Audrain County;
F. C. Bryan, Principal High School, Mexico.

NEBRASKA.

The Hall Co Teachers' Institute will be held at Grand Island, Aug. 24-28. Conductor, Dewitte H. Vantine; Instructors—Profs. W. W. Drummond, R. J. Barr, and H. W. Jansen.

The Howard County Teachers' Institute will be held St. Paul for two weeks, commencing Aug. 24. Conducto C. C. Covey, St. Paul; Instructors—L. D. Davidso Stromsburg, Geo. M. Whicher, Hastings.

The Washington County Normal Institute commenced at Blair, Aug. 10, and will continue two weeks Conductor, W. V. Miller; Instructors—Profs. D. K. Bond and J. K. Stableton.

NEW YORK

The Allegany County Teachers' Institute will be held at Belmont during the week beginning Aug. 31. Dr. James N. French and Prof. James Johonnot have been appointed instructors. Lectures will be delivered during the week by Dr. French and others.

There will be a joint Teachers' Association of Clinton and Essex Counties at Keeseville, commencing Aug. 27, and lasting three days.

lasting three days.

The Commissioners of Education for Long Island City have approved the plans and specifications for a new primary school for the Fourth Ward, and called for bids. A movement is also on foot for a new school for the Third Ward (Rayenswood). Much dissatisfaction is felt over the recent changes by Mayor Petry in the Board of Education of Long Island City. The Mayor has not yet been able to find a competent successor to Commissioner Barlow, and the Fifth Ward is therefore without representation in the Board. The commissioners have appointed a new principal for the Fourth Ward school at a salary of \$1,400 per annum.

Perf. J. Carlton Norris, formerly, principal of the Wal-

For the Fourth ward schools a salary of a specific part of the Wallworth Academy, has been elected principal of Canandaigua Academy, vice Rev. George R. Smith, resigned. Mr. Norris comes highly recommended, having had twelve years experience as principal of a prosperous academy. John A. Squire, a graduate of Boston Latin School and Harvard College, will have charge of the classical department.

College, will have charge of the classical department.

The School Board of Utica has finally made appointments of teachers for the coming year. There are 150 teachers and all but eight were re-appointed. Frank E. Wells, of Nunda, is principal of the advanced school in place of Professor O. C. Harrington. Of five teachers dismissed four were dropped because age had impaired their usefulness. Ten new teachers were appointed, and some of them are not graduates of the academy as the rules require.

Cabarrus Co. Institute opened at Concord, Aug. 10, to

The Mooresboro Teachers' Institute was a decided success. One hundred and thirty teachers attended. The instructors were Miss J. A. McDonaid of Raleigh; Capt. W. I. R. Bell, Principal Kings Mountain Military High School; Z. T. Whiteside, A. M. Ayr, Prof. B. H. Bridges, Principal

Mooresboro High School; Capt. H. T. Roysler, Co. Supt. Cleveland Co. Additional lectures were delivered by Prof. J. H. Yaeboro, Forest City; Hon. T. B. Justice, Jr., Rutherfordlow, Prof. M. L. White, Hon. Thos. Dixon, Jr., and others.

The Hamilton Co. Teachers' Institute was held at Mt. Healthy, Aug. 17-21. Instructors: Dr. John Hancock, Dayton; President A. Schuyler, Baldwin University, Berea; Miss M. Morris, Wyoming; Supt. J. P. Cummins, Riverside; Supt. C. S. Fay, Wyoming. Officers: A. J. McGrew, President; Miss Emma Hay, Secretary.

The Pickaway Co. Teachers' Institute will be held at Circleville, Aug. 24-28. Profs. J. C. Hartzler, Supt. of the Newark (O.) Schools, Elisha Warner, and M. L. Smith have been secured as instructors.

PENNSYLVANIA.

Allegheny and Warren Counties each begin an Institute Aug. 34, the former at Allegheny City, the latter at Warren.

Warren.

Three important measures passed the recent session of the State Legislature and last week received Governor Pattison's autogragh. The first provides that the school month shall hereafter consist of twenty days; that no school shall be kept open on Saturdays or on any legal holiday; that all the schools be closed during the time of holding the annual county institute. The second measure permits directors to purchase school books for the pupils out of the general school fund. The third act authorizes school directors to employ teachers holding professional certificates for a period of two years, and those holding permanent certificates or normal school diplomas for a period of three years. Formerly all teachers were employed for one year.

WILL S. MONROE. WASHINGTON TERRITORY.

The Territorial Institute opened at Vancouvers, Aug. 17.

PERSONAL.

JOHN H. HACKENBERG has been re-elected Principal of the Humboldt schools.

the Humboldt schools.

The election of Joel Williams as Superintendent of the forty-two schools of Hazle township places at the head of those schools an able, earnest and conscientious man.

PROF. A. W. POTTER, Principal of the Third District. City of Wilkes Barre, High School, has been made Principal of all the schools of that district, and his salary increased to \$1,600 per annunc.

D. A. BECKLY, for maty years past Postmaster Bloomsburg, has been elected Principal of the schools hat town.

PROFS. POTTER and McCONNON, of Wilkes Barre, are the authors of a series of mathematical tablets published by Potter, Ainsworth & Co., N. Y. This series of tablets will supply a long felt want in the way of furnishing supplementary work for the pupilis, and as the cost of tablets will be about the same as the cost of blank paper or plank tablets, an immense sale can safely be predicted.

PROF. J. R. WEATHERS is conducting a Normal at New Providence, Ind.

SUPT. J. F. GLEASON held an Institute at Fargo, Dak., he week beginning Aug. 17. PROF. F. V. IRISH, of Lima, O., is preparing some lec-ures on the subject of teaching, to be delivered at Insti-

"The Rev. Samuel Irenaus Prime, D.D., died at Manchester, Vt., July 18. For nearly half a century he had been prominently connected with the New York Observer, and his "Irenews Letters" have been read around the world. He was the author of a number of volumes on travels, biographies, and religious sketches, and held inductial posts in the service of his church, the Presbyterian.

DR. RIDPATH, of DePauw University, has resigned, and is resignation has been accepted. Dr. J. P. D. John has been elected Vice-President.

E. C. Whitz, nephew of Dr. E. E. White, and a grad-late of Purdue, has been tendered and has accepted the uperintendency of the public schools at Carthage, Mo. He has been teaching the past year at Albion, Noble county,

PROF. HENRY A. FRINK, of Hamilton College, has be called to the professorship of the English Language Literature at Amberst College, as the successor of P. Chickering.

The Hon. Andrew D. White authorizes the statement that he is not and cannot be a candidate for Governor of the state. He leaves for Europe in August or September.

Prof. Charles Kendall. Adams, of Michigan University, has been elected President of Cornell University, in the place of Andrew D. White, resigned.

Miss Lillian M. Munger has recently given a lecture on Michael Angelo, before select audiences in Bangor and several other cities in Maine. The lecture is illustrated by some fifty views, and is highly commended by the city press and by others who have heard it. Miss Munger is known as a successful high school and normal school

teacher.

From a Bloomfield (Iowa) paper we learn that Prof. W.

N. HULL has recently had charge of classes in book-keeping, physiology, reading, orthography, penmanship, and drawing. The Bloomfield press speaks in the highest terms of his work, and says that "he is made of the very best timber that teachers are made of. He is one of the most thorough instructors in the state."

Ir is rumored that during the absence of President Eliot in Europe, next year, JAMES RUSSELL LOWKLL will be Vice-President, and have possession of the Presidential dignities of Harvard University.

Prof. A. L. E. CROUTER, Principal of the Pennsylvania.

PROF. A. L. E. CROUTER, Principal of the Pennsylvania Institute for the Deaf and Dumb, has recently returned from an extended tour of inspection of the leading deaf mute institutions of the United States. Since his return he has received the degree of Master of Arts from the Na-tional Deaf Mute College, of Washington, D. C.

SUPT. G. L. PINKHAM will begin a two weeks' Normal astitute at Miller, Dak., Aug. 24.

PROF. CYBUS NORTHROP, formerly of Yale, but now resident of Minnesota University, recently underwent a evere surgical operation and is still confined to his bed.

THE death of Mrs. HELEN HUNT JACKSON, "H. H.," robs this country of one of the brightest writers and clearest thinkers among our women.

NEW YORK STATE EXAMINATION QUES

Examination for State Certificates, June 30, 1885.

RHETORIC.

- 1. Discuss the relations and the distinctions which you recognize between elementary composition work the study of rhetoric.
- 2. What phases of punctuation belong to rhetoric, and what to elementary composition?

 3. State the uses of the semicolon.
- 4. Define invention and style, and state to which of the two you would devote the greater attention in the study of rhetoric.
- 5. Give the synonyms of kill, and indicate the shade of meaning expressed by each.
- 6. State the principles to be followed in the formation and the acceptance of new words.
- 7. Discuss the use of slang and of puus.
- 8. State the resemblances and the differences between prose and poetry.
- 9. Quote or compose examples in two of the follow. ing meters: Iambic pentameter, dactylic hexameter, anapestic trimeter, trochaic dimeter.
- 10. Write or quote a passage containing a figure of speech, and name the figure.

GEOMETRY.

- 1. State two propositions based on the fact that the um of the three interior angles of any plane triangle equals two right angles.
- 2. Demonstrate the process of finding the number of degrees in one of the interior angles of any regular pol-
 - 3. Prove that a chord of 60° equals radius.
- 4. Show, geometrically, the area of a square described on the difference of two given lines.

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- 5. Prove that the areas of triangles having equal altitudes are to each other as their ba-
- 6. How may a mathematical line be generated? How a mathematical plane? How a mathematical circle?
- 7. Prove that an angle in a semi-circle is a right angle.
- 8. Deduce the rule for finding the area of a circle
- 9. Prove what is the measure of an angle formed by tangent and a chord.
- 10. Demonstrate the following: If all the sides of a egular polygon be produced in the same direction, the sum of all the exterior angles thus formed will equal 8600.

COMPOSITION.

- 1. What is the most important prerequisite for good peaking or writing? 2. Mention five essentials of good written composi-
- What proportion of the entire work of an ordinary
- chool should be devoted to the direct culture of expression ? 4. To what extent should the oral and written ex-
- pression of knowledge form a part of school work in geography?
- 5. In acquiring the ability to compose well, how much importance should be attached to practice as opposed to a theoretical knowledge of the facts and laws of language?
- 6. Write a complete letter to some person, outline the form of an envelope and indicate the position of the stamp, and write the superscription in its proper position.
- 7. Outline a plan for securing from a class of average children, eight years old and without experience in such work, a composition about their own school-house. 8. Outline a plan of composition work for pupils of
- cademic grade. 9. Write a note inviting a friend to tea, and a suita-
- ble reply. 10. Write, concerning this examination, an item suitable for insertion in a daily newspaper.

(To be Continued.)

Better Than Vacation.

This is pre-emiently the vacation month, when the This is pre-emiently the vacation month, when thousands seek rest and recreation. But to those who suffer the depressing effects of summer debility, the disagrebable symptoms of scrofula, the tortures of biliousness, dyspepsia, or sick headache, there is more pain than pleasure in leaving home. To such we say, give Hood's Sarsaparılla a trial. It will purify your blood, tone up and strengthen your body, expel every trace of scrotula, correct biliousness, and positively cure dyspepsia or sick headache. Take it before you go, and you will enjoy your vacation a thousand fold, rk

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LETTERS.

What is meant by "the three Rs"? J. A. C. Reading, (W)riting, and (A)rithmetic.-B.]

Who is the President of Liberia, and how often is the chief ruler elected?

M. V.

[Hilary R. W. Johnson, elected in January, 1884. A new one is elected every two years.—B.]

How long is the day at the North Pole? When doe begin and when does it end?

[The day at the North Pole, as at other places, is 24 hours long. The 'day begins at 12 o'clock midnight, but the sun is above the horizon a trifle over half a year at one time.—K.]

How many men in the U. S. army? How many in C. P. e navy? [Army, 80,000; navy, 10,000.—B.]

With what nations have we extradition treaties?

[Great Britain, France, Prussia, and other states of the North German Confederation, Switzerland, Venez-uela, Dominican Republic, Sweden and Norway, Italy, Nicaragua, Austria, Mexico, and Hayti.—B.]

How should physiology be taught?

In general, systematically and objectively. Make out a list of the different systems of the human body, and take up each in its order, dwelling upon each one until it is pretty thoroughly understood. Cats and other inferior animals can be made to furnish specimens of the subjects to be studied, and should be whenever possible. Books and oral instruction cannot supply their place.—

Why are the veins of the human body blue? L. S.

why are the veins of the human body blue? L. S. [The blood, carried back to the lungs for purification, has been chemically changed by the loss of its oxygen and the acquisition of carbonic acid and waste material. This turns its color from a bright red to a dark, ruddy color; hence it is sometimes called blue or black blood.—A.]

Who was the Washington of South America?
D. M. V.

[None deserved the title better than Simon Bolivar, the liberator of Colombia, Venezuela, and Bolivia. The last was named after him.—B.]

What are the six Great Powers of the world?
M. S. N.

[England, France, Germany, Russia, Austria, and the United States.—B.]

1. Who was William Pitt? 2. At what battle was the wooden leg of a hostile general among the trophies?
3. How many ex-presidents of the U. S. are now living?
4. How can you account for Greenland being so called?
5. Who were raised to the Presidency in consequence of their military *ervices? 6. What are "The Shades of Death," and why so called? 7. What philosopher drew up a colonial constitution that proved a failure?
8. What present state capital was named after a queen?
9. At what three places were treaties made that closed our foreign wars? 10. What three cities have been successively the seat of government of the U. S.? 11. How often, and under whom, has Mexico been an empire? 12. What was the first capital of Brazil?

D. M. V.

pire? 12. What was the first capital of Brazil?

(1) A great English statesman; was prime minister under George III. and opposed the stamp act; was created Earl of Chatham, to the disappointment of the common people, by whom he was called "the great commoner." (2) At the battle of Cerro Gordo, the Mexicans fled with so much haste that Santa Anna was obliged to leave his wooden leg in the carriage behind him. (3) Two, Hayes and Arthur; (4) In 983 Erick the Red (so called from the color of his hair) sailed from Iceland to search for a traditionary land to the west, doubled Cape Farewell and saw large herds of reindeer browsing on the meadow lands. The country pleased him and he called it "Greenland." (5) Jackson, Harrison, Taylor, Grant. (6) A forest of beech woods, traversed by laurel thickets and steppes of huckleberry bushes, covers the country of the upper Lehigh (Pa.,) and is called "The Shades of Death," but why, our authority says not. (7) Benjamin Franklin, at the general congress at Albany, 1754, proposed a plan of union for the colonies which was rejected by the board of trade in England as too democratic. (8) Annapolis, named in honor of Queen Anne. (9) Paris, Ghent, and Algiers. (10) New York, Philadelphia, and Washington. (11) Twice, under Iturbide (1822) and Maximillan (1864). (12) San Salvador da Bahia is the first mentioned in its history.—B.]

(1) In our earlier history the candidate that received the greatest number of votes became President, and the one receiving the next smaller became Vice President, allowing them to belong to opposite parties. When was this plan changed? (2) What trices belonged to the Algonquins? (3) What was the form of government during the Revolution? (4) How can a feeling of fear, such as baving a trembling voice, etc., when declaiming before the public, be overcome?

[(1) During Jefferson's administration. The contest between Jefferson and Burr revealed the necessity for better provision, and the twelfth amendment was adopted. (2) The chief Algonquin tribes were the Crees,

Nasquapees, Montagnais, Algonquins proper, Nipissings. Ottawas, Chippewas, Menomonees, Pottawatamies, Miamia, Saes, Foxes, Kiekapoos, Illinois, Micmacs, Eteohemins, Abenaquis, Sokokes, Pequods, Narragansetts, Mohegans, Lenni Lenape or Delawares, Nanticokes, Powhatans, Pampticoes, and Shawnees. The Blackfeet and Cheyennes were also regarded as isolated branches of the same family. (3) The Continental Congress, which was inaugurated in 1774, and constituted the governing power throughout the Revolution, was republican in form. It was composed of delegates from the colonies. (4) By entering into the spirit of his subject so as to forget self, and by becoming accustomed to the ordeal.—B.]

A letter from a gentleman well versed in chronological data, points out an error, common to all our text books, namely, that the so-called Julian year and Julian period are both of the same origin, and credited to Julius Casar.

Julian period are both of the same origin, and credited to Julius Caesar.

According to chronological history, the Julian period is a period of 7980 Julian years (the product of the solar cycle. lunar cycle, and Roman indiction, viz.: 28×19×15=7980), beginning with the year 4713 B. C., so that the present year is the 6598th year of the Julian period, as stated in the Nautical Almanac. This period (the Julian) was introduced by Joseph Scaliger, and not after Julius Cæsar, who gave us the Julian year.

Inasmuch as the possibility of errors creeping into text-books is thus proven, I take this opportunity to point out another error common to text-books for more than twenty-three hundred years, namely, that sides and diagonals of squares are incommensurable in relationship. For while it is true that a decimal notation will not finitely express the ratio of sides and diagonals of squares can be finitely expressed by a notation based on a denominator 17 instead of 10. Geometric incommensurability (so called) is not a natural result of disproportion, but a natural consequence of using a notation not fit to express the required proportion.

Believing your Journal aims at enlightenment, and

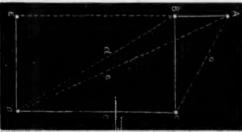
Believing your JOURNAL aims at enlightenment, and thinking the above communication may interest some of your subscribers, I respectfully submit it for con-sideration.

sideration.

The gentleman to whom we are indebted for the distinction made between the Julian period and the Julian year, is Prof. F. Hese, C. E., Fort Dodge, Iowa; and for the suggestions of a change of notation from 10 to 17, which will make every geometric ratio commensurable and expressible in exact and finite numbers, the undersigned is responsible, and is prepared to prove the same by demonstrations.

CHABLES DE MEDICI.

ANSWERS.



21. Given Height of Tower A = 125 ft. " B = 75 " " C = 160 " " D = 70 "

D = 70 "

A B = 40 Rods = 230 vds.

A C+C B= 1-2 mi = 880 yds.

DB - 834 yds. = CD.

Required, line to connect the tops of A and D.

Let AC = a.

BC = b.

"CD = c.

" CD = c.
" BD = d.

" AD = e.

Solution.

a + b = 880. (1.) a*-b* = AB* Sq. on hypot., (2.) a*-b* = 46400. (3.) Dividing (3) by A+b.

Substituting value of a+b, $a-b = \frac{48400}{999}$

a-b = 55 a+b = 880 a = 935 a = 467.5 b = 412.5

c + 82.5 = d

c+82.5 = d $c^{2}+165c+6805.25 = d^{2}$ (5.) $c^{3}+b^{3} = d^{3}$ sq. on bypothenuse, $c^{3}+412.5^{3} = d^{2}$ (6.) By substitution (5) & (6), $c^{2}+165c+6805.25 = c^{3}+412.5^{3}$ 165c = 163350

c = 990

AE = AB+CD = base of right-angle triangle.

BC = Altitude.

AE = 1310.

1210*+412 5* = E*.

1464100+170156.25 = E³, E = 1278.3+

Height of A—height of B = 55 ft. = 18 33 yds. the altitude of a triangle whose base is = E.

hen E*+18.83 X, Line required, 1634256 25+386.11 = X. X = 1278.51 yds. = 382.456+Rod. Wm. B. Vane.

33. 100 per cent=part principal paid 1st year.

106 = " " 2d year.

112.36 = " " 3d year.

119.1016 = " " 4th year.

487.4616 per cent=\$4500.

1 per cent=\$4500 + 437.4616,
which is 10.2866+, and 100 per cent.=1028.66+, the annual principal; to this we must add 6 per cent. of \$4500, which is

4500

\$270.00 the annual interest.

1028.66+

\$1298.66+=annual payment.

E. W. P.

37. Let p = annual paym'i.

Then,

\$6,000 (1 + .06) = amt. due at end of 1st year.

\$6,000 (1 + .06) - p = sum due after 1st paym't is mad.

\$6,000 (1 + .06) - p (1 + .06) - p = sum due after 2!

payment. \$6,000 $(1+.06)^s - p$ $(1+.06)^s - p$ (1+.06) - p = sum due after 3d payment. After 3d paym't the debt is discharged.

\$6,000 $(1 + .06)^8 - p (1 + .06)^8 - p (1 + .06) - p = 0.$

 $p (1 + .06) * + p (1 + .06) + p = $6,000 (1 + .06) * \\ $6,000 (1 + .06) *$

 $(1+.06)^{9}+(1+.06)+1$

Or, As the denom. forms a geom. series, $\$6,000 \ (1+.06)^s$ $\$6,000 \times .06 \times (1+.06)^s$ $(1+.06)^8-1$ $(1 + .06)^a - 1$

\$6,000 × .06 × 1.191016 428.76576

= 191016 = 1.191016 - 1

2244.65 + annual payment. Ans.
For complete explanation of problems of this class, see Milne's Inductive Aigebra, p. 284.

L. S.

46. Let x=No. acres.

then $\sqrt{160}x$ =No. rods on one side, and 4/100x=No. rods on four sides, and 4×14./160x=No. rails required. But No. rails=No. acres.

:. $14 \times 4 \sqrt{160} x = x$, squaring both members, $x^2 = 501,760 x$, dividing by x, x = 501,760.

W. G. S.

QUESTIONS.

49. Please analyze, "Is the old Grecian spirit frozen in your veins, that ye do crouch and cower like base-bor. slaves beneath your master's lash?"

50. A tree, 60 feet high, breaks so that one end touches the ground, 20 feet from the foot of the tree, find length of part)broken off—by arithmetic?

J. T. N.

of part broken on—by antimices.

51. A bank by discounting a note at 6 per cent., gains a discount equal to 61 per cent. interest. How long was the note discounted before it became due?

D. O. S.

53. I invested \$2,700 in stock at 25 per cent, discount, which pays 8 per cent, annual dividends. How much must I invest in stock at 4 per cent, discount, and paying 10 per cent, annual dividends, to secure an equal income?

W. T.

The claims as to the curative powers of Hood's Sarsa-parilla are base! enfirely on what the people say it has done for them. Send to C. I. Hood & Co., Lowell, Mass., for a book containing statements of many re-markable cures by Hood's Sarsaparilla.

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BOOK DEPARTMENT.

NEW BOOKS.

LECTURES ON TRACHING. Delivered in the University of Cambridge, England, during the Lent Term, 1890. By J. G. Fitch, M.A. New Edition, with a Preface by an American Normal Teacher. New York : E. L. Kellogg & Co.

In England these lectures of Mr. Fitch have for several years been highly prized, as combining in an admirable manner, both the theoretical and practical sides of education. All of its discussions are ba on sound psychological principles, and give admirable advice on everything connected with the science and art of teaching, from the furnishing of the school-room, the studies for a teacher to understand, to the ques ions proper to ask on an examination.

Mr. Fitch possesses a clear and vigorous style. No one is at a loss to know exactly what he mesns. has his ideas, and tells what he thinks in such a manner as to be helpful to all who are striving to improve either their methods or philosophy. The best that can be said of the book is that it is satisfactory. While many works on teaching deal in generalities, Mr. Fitch ends to particulars. In speaking, for example, concerning "Examinations," he tells exactly what to do under various circumstances, how to judge of quality, how to ask the questions, and how to decide concerning general fitness. In many points experienced teachers may disagree with him, but no one can possibly misapprehend or mistake his meaning.

An outline of the chapters will give an idea of its com pleteness. They are : The Teacher and His Assistants The School, its Aims and Organization; The School-Room and its Appliances; Discipline; Learning and Remembering; Examining; Preparatory Training; The Study of Language; The English Language; Arithmetic as an Art; Arithmetic as a Science; Geography and the Learning of Facts; History; Natural Science; The Corelation of Studies.

It is safe to say, no teacher can lay claim to being vell-informed who has not read this admirable work. Its appreciation is shown by its adoption by several State Teachers' Reading Circles, as a work to be thor oughly read by its members.

TALKS WITH MY BOYS. By Wm. A. Mowry. Bos ton: New England Publishing Co.

Under such headings as "Concentration of Mind Black the Heels of Your Boots"; "Be Exact in Thought and Word," etc., is given an amount of direct, earnest, practical advice that cannot fail of being of the utmost help to young men. The book has grown out of the practical necessities of the school-room, during an experience of twenty years, and is altogether worthy such an extraction, being the sort of advice that will be listened to and followed.

NUMBER TABLETS FOR SUPPLEMENTARY WORK IN ARITHMETIC. By A. W. Potter and T. J. McConnon. STANDARD COMPOSITION BOOKS.

DINSMORE'S MODEL SCRIPT SPELLING-BOOK BLANKS. New York, Boston, and Chicago: Potter, Ainsworth & Co.

These books, although small, are most useful in design and execution. The NUMBER TABLETS afford a cheap and serviceable way of testing a class, and now that slates are becoming unpopular, these tablets should find an extensive sale. The Composition Books and SPELLING BOOKS are well known and highly appreciated.

THE CHEMISTRY OF COOKERY. By W. Mattien Williams. New York : D. Appleton & Co.

This work is based on a series of papers that appeared in Knowledge a year or two ago, and have also been published in the Popular Science Monthly. With a moderate effort of attention, any unlearned but intelligent reader of either sex may understand all the contents of these chapters, whose purpose is explained in the title, and the necessity of whose publication arises from the fact that almost nothing worthy the name of research has heretofore been brought to bear upon this important and practical subject.

ROBERT ORD'S ATONEMENT. By Rosa Nouchette Carey. Philadelphia: J. B. Lippincott & Co

Robert Ord is a proud, self-willed young fellow, who has counted on an inheritance from his aunt, and when she leaves everything to the young woman who has been her companion, his anger and dislike lead him to great lengths. Later his bethrothed succumbs to disease, chiefly because of his stubborn refusal to allow her to be sent abroad at the expense of the heire u, and his "atonement" consists of a few years of not over-

violent remorse, after which, he quietly marries—the heiress herself! she having previously drawn Roberts brother into a declaration of love, which results in his sailing for Australia, and getting drowned. The vicar and his wife, who seem to be the chief consolers of the others in their misery, are the pleasantest people in the book; one hasn't much patience with the pitiful, uncertain little heiress. The story has some good points, and some not so good. It will do to pass an idle hour.

WORSE THAN WASTED. By Dr. Wm. Hargreaves. New York: J. N. Stearns, Publishing Agent, 58 Reade Street.

The National Temperance Society offers here facts and figures from the last census and other official documents, presenting an array of statistics and arguments important and valuable to every friend of temperance; o an account, from official sources, of the resources of the United States-Agriculture, Manufactures, Trade and Commerce, Live Stock, Railroads, Mines, Navigation, Fisheries, Personal and Real Estate

The book considers and presents the relations of the se of intoxicating drinks and the traffic in them to trade, labor, and the general prosperity of the country, showing the social, moral and pecuniary evils inflicted upon our country.

It contains eighteen statistical, tables giving official figures invaluable to every friend of the cause. temperance worker, every student of political economy and reform, every lover of God, home, and country should read these facts to post himself on this great

ANTHROPOLOGY. By Daniel Wilson, LL.D. With an Appendix on Archeology, by E. B. Tylor, F.R.S. Pamphlet. Price 15 cts. This constitutes No. 7 of the Humboldt Library, published in New York by J. Fitzgerald, 393 Pearl St.

HOUSE STUDIES: A Book of Language Les Children of all Ages. For home use, also intended for older people. By W. H. Wheeler. Price by mail, 15 cts. Andover, Mass. : W. H. Wheeler.

We do not exactly get the author's method of teach ing. In Part I, he talks to the children. He then gives twenty lessons. Lesson I., "Write letters, etc." Lesson II., "Write words, etc." Lesson III., "Copy words, etc." Lesson IV., "Make up sentence: all for yourselves, etc." Lesson VIII., "Connect adjectives and nouns, etc." He hasn't taught what adjectives and nouns are, but he tells the children that "if you don't understand this you must get your mamma or teacher to help you get started. In Lesson XV, he gives some Choctaw:

" Kar til na roko Ri fa nu sola, etc."

He tells the children, "You can sing your (hoctaw and make it up as you go, if you want to. It's a curious book. We can't make up our minds whether the author is in earnest or in jest. Perhaps it is intended for Choctaw children.

ANNOUNCEMENTS.

Townsend MacCoun announces the publication in September of an edition of Labberton's Historical Atlas with Text, thus making this celebrated Atlas available as an independent text-book. This edition will also contain thirty new maps on early English History. As the author of the chart has been a practical tea for fifty years we shall undoubtedly have a model his tory for class use.

A timely and well-authenticated article on the his sociations connected with General Grant's burial place in Riverside Park, will be published in the Magazine of American History for September.

"As it was Written," a novel in the press of Messrs. Cassell & Company, is, it is believed, destined to make no ordinary impression. The author, Sydney Luska, is a young New Yorker, and his story is one of the Jewish

Funk and Wagnalls, New York, will publish a subcription edition of Miss Cleveland's book, Eliot's Poetry and other studies." It will be illustrated, and be sold exclusively by subscription. Price, \$2.00. The book has had a remarkable sale; in six weeks it has run through ten editions It is being translated into Russian, German, French, and Italian,

"A Complete Rhetoric" for Schools. Colleges and Private Study, has oeen prepared by Prof. A. H. Welsh, and is announced for early publication by S. C. Griggs & Co. Prof. Welsh is well known as the author of th "Development of English Literature and Language" and "Essentials of English,"

"The Elements of Chemistry," Descriptive and Qualitative. A Text-book for Beginners. By James H. Shepard, Instructor in Chemistry, Ypsilanti High School, Mich. Boston: Ginn & Co.

Its distinctive features are: experimental and inductive methods; the union of descriptive and qualitative chemistry, allowing these kindred branches to supplement and illustrate each other; a practical course of laboratory work, illustrating the principles of the science, and their application; a fair presentation of chemical theories, and a conciseness confining the work to the required limits.

The advantages to be gained from the new methods of scientific study embodied in this volume are briefly these: Skill in manipulation, and a knowledge of the subject which no mere book-teaching can give, habits of observation, power to do and to originate, as well as much practical and useful information. This text-book is prepared with special reference to the needs of schools where the new methods are employed.

"Elements of Co-ordinate Geometry." By W. B. Smith, Professor of Mathemathics, Central College, Missouri. Boston: Ginn & Co.

(1) Its size is such it can be mastered in the time generally allowed. (2) The scope is far wider than in any other American work. (3) The combination of small size and large scope has been secured through superior methods—modern, direct and rapid. (4) Con-spicuous among such methods is that of determinants, here presented, by the union of theory and practice, in its real power and beauty. (5) Confusion is shut out by a consistent and self-explaining annotation. (6) The order of development is natural and leads without break or turn from the simplest to the most complex. The method is heuristic. (7) The student's grasp is strengthened by numerous exercises. (8) The work has been tested at every point in the class room.

PAMPHLETS, CATALOGUES, &c., RECEIVED.

The Western Society for Psychical Research. Chicago, Ill.: E. Woodhead, 171 West Washington Street.

Descriptions of the Annual and Seasonal Climatic Maps of the United States. By Charles Denison, A.M., M.D., Denver, Col-

Letter from Hon. Horatio Seymour to the S-cretary of the New York Board of Trade and Transportation, showing the great value of the State Canals, and favoring their improvement by the State. New York: Daily Commercial Bulletin Print, 32 Broadway. Annual Report of the Board of Managers of the New York State Reformatory, at Elmira, N. Y., 1884.

Catalogue of the Branch Normal College of the Arkansas Industrial University, Pine Bluff, Arkansas. 1885-6. J. C. Corbin, A.M.

Circulars of Information of the Bureau of Education. No. 2.

Catalogue State Normal School, Castleton, Vt. Abel E. Leav-nworth, A.M., Principal. talogue Tulane University of Louisiana. 1885-6. New Orlean. Preston Johnston, LL.D., President.

An Address on the Tehuantepee Ship Railway. Ry E. L. Cor-nell, C.E.

Discussion of the Paper of E. Sweet, on The Radical Enlargement of the Brie Canal. By E. L. Corthell, C.E. Course of Study for Jefferson County (Fairfield, Iowa) Normal Institute, Aug. 6-28, 1885, O. C. Scott, Conductor.

Rules and Regulations for the Government of the Public Schools of the City of Stillwater, Minn. V. G. Curtis, Supt.

Catalogue of the Ohio Normal University. 1884-5. H. S. Lehr, Report of the Board of Education of Geddes, N. Y. Chas. E. White, Supt.

A Lesson in Book-reeping. A Statement of First Principles. By J. H. Palmer. 10 cts. Jacksonville, Ill. Cause and Effect in History. By L. R. Klemm, Ph. D., Supt. of Schools, Hamilton, Ohio.

hth Annual Report of the Board of Education of Bridge-Conn., for the year ending July 14th, 1884. Annual Report of the Superintendent of Public Instruction to the Board of Education of the City of Brooklyn. Han. Calvin Patterson, Supt.

The History of a Legis ative Sham. Issued by the Gas Con-umers' Association, N. Y. City. National Primary Teachers' Sunday School Union. Frank Hamilton, Sec., Navy Dep't, Washington, D. C.

Annual Report of the Board of Education of the City of Pater son, N. J., for the year ending March 20th, 1885. C. E. Melener City Supt.

EXAMPLES IN PRIMARY ARITHMETIC.—Designed for pract calevery day use, in the Primary Department of public and private schools. By Julius L. Townsond, Principal of the Franklin Grammar School, Rochester, N. Y. Rochester, N. Y.: Scranton, Wetmore & Co. 1885. The examples in this little book of thirty-ax pages are well selected.

THE INDUSTRIAL QUESTION IN THE UNITED STATES.—An dress delivered before the Alumni Association of the Unive of the State of Missouri. By Hon. S. R. Rikins, of New York

THE TRACHER'S "BLUE BOOK" is the title of a book edit published by T. A. De Weese, South Bend, Ind., which is piete tracher's and school officer's directory of that State, to with salaries and probable vacancies for 1885-8.

Pre-historic Archaeology. By Daniel Wilson, Ph. D.,
Appendix on Anthropology, by B. B. Tytor, F.R.S. Price,
post free. New York: J. Fitzgerald, Publisher, 2.63 Pearl
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